with patches of grey, suggesting that there may be an as yet undescribed immature plumage for this species.

The frequency of sightings of the Crimson Fruitcrow suggests that it is less common than the Pompador Cotinga *Xipholena punicea*, which was seen on c. 90% of the census days, but is significantly more common than either the Spangled Cotinga *Cotinga cayana* or the Purple-breasted Cotinga *C. cotinga*.

Snow (1982: 153) suggests that the Capuchinbird *Perissocephalus tricolor*, may competitively exclude other large fruitcrows. In the study area north of Manaus, both *P. tricolor* and *H. militaris* are, for large cotingids, relatively common, suggesting that in suitable habitat of several hundred km² these 2 species are not exclusive.

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Additions and corrections to the avifauna of Zaïre (1)

by M. Louette

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The following comments are mainly due to reidentifications of specimens in Koninklijk Museum voor Midden-Afrika (KMMA).

Falco amurensis

It is noteworthy that there are in fact 4 specimen records of this migrant from Zaïre (all in KMMA): Lokoma (Equateur), 23 January 1949; Bambesa (Uele), 4 February 1938; Butembo (Kivu), 12 October 1957; and Kinda (Shaba), 20 October 1914. The last 2 mentioned are reidentifications.

Curry-Lindahl (1981) mentions a spring passage in eastern Kivu in April (once), presumably his own observation.

Bucorvus leadbeateri

As far as I know nothing has been published on this bird's occurrence along the middle Zaïre River, though shown there (4 dots at c. 2°-4°S, 17°E) in Snow (1978). Lippens & Wille (1976), however, give records more to the southeast, for Kwilu and Kwango (along the River Kwango).

Apaloderma aequatoriale

Shortly after commenting that the atlas map of *A. aequatoriale* in Snow (1978) needed no adjustments (Louette 1984), I started reinvestigating this species. I must change this statement now; the KMMA has a number of specimens, formerly misidentified as *A. narina*, from the east-central part of the equatorial forest, suggesting that *A. aequatoriale* has a continuous distribution in that biome from about Mt Cameroon eastwards (Fig. 1).

Figure 1. Distribution of *Apaloderma aequatoriale*. Shading indicates equatorial forest.

Batis minor and *B. molitor*

Hall & Moreau (1970) show overlap of these 2 taxa in southwest Zaïre and along the Albertine rift. Nevertheless, they consider both as belonging to one complex superspecies which includes the other *Batis* savanna species and, though they can be divided on ecological grounds, even the smaller forest forms of the *minulla*, *minima* and *poensis* groups. Lawson (1986) has shown that the forest forms are distinct and announces a general study of the savanna *Batis*. The present notes will be limited to clarifying the distribution in Zaïre.

Rand (1953) studied the situation in East Africa and Britton (1980) noticed that overlap between *B. minor* and *B. molitor* is more apparent than real there: in relation to Zaïre's boundaries, *B. molitor* occurs in Tanzania and *B. minor* in Uganda (except in the southwest). The situation

in Zaïre is the same; both species there are in fact also parapatric (see below).

TABLE 1

Batis minor and *B. molitor* populations from Zaïre.
Measurements in mm

Taxon	Region		Wing n	Wing av.	Wing range	Tail n	Tail av.	Tail range	Tail/ Wing
minor									
nyansae	N Zaïre (including 4 ♂♂ from Cameroon)	♂♂	11	58.7	57.0–61.0		42.7	40.0–46.0	.727
		♀♀	15	57.9	54.5–59.5		41.6	40.0–43.5	.718
nyansae	Kasai, SW Zaïre	♂♂	12	58.9	56.5–60.0	(11)	42.5	40.5–44.0	.722
		♀♀	12	58.4	55.0–60.0		41.7	40.0–45.0	.714
minor/molitor?									
puella	Kivu, Rwanda	♂♂	16	61.1	58.5–64.0		43.7	41.5–46.0	.715
		♀♀	17	60.3	57.5–64.5	(16)	43.6	40.5–46.0	.723
molitor									
palliditergum	Kasaji (Shaba)	♂♂	10	62.9	61.0–65.0		39.9	38.0–41.5	.634
		♀♀	15	61.8	60.0–64.0		40.5	38.0–42.0	.655
palliditergum	Upemba (Shaba)	♂♂	9	63.9	62.0–67.0		41.5	40.5–43.0	.649
		♀♀	7	63.2	62.0–64.0		42.6	40.0–44.5	.674
palliditergum	Rest of Shaba	♂♂	12	62.6	59.5–64.5		39.8	38.0–43.0	.635
		♀♀	13	61.5	60.0–65.0		40.4	37.0–43.5	.656

Females of this complex can easily be assigned to species using the presence or absence of a brown chin-spot, but males are extremely similar and the characteristics used in literature to separate the species are not very useful (e.g. the extent of the white supraloral line – Chapin 1953). I have measured geographical populations (Table 1) and find that differences are small, although *minor* is somewhat smaller on average than *molitor*, and they have a different tail/wing ratio.

In Lower Zaïre and Kasai (see Map in Louette 1986: 130) only *B. minor* has been found, contiguous with the range in Angola. The subspecific name once applied to this population is *congoensis* (see below). In northwestern Angola, *B. minor* (Traylor (1962) lists 3 localities near Malange) nowhere overlaps with *B. molitor*, although the *B. molitor* specimen cited by Chapin (1953) from Tembo Aluma (7°39'S, 17°16'E) in Angola was close to the Zaïre border. Still in Angola, Traylor (1962) also lists Dundo (7°21'S, 20°40'E), very close to the Zaïre border, for a male *B. molitor*, though he does not say how he determined the species.

The KMMA has a female *B. molitor* from Ngombe (6°35'S, 20°43'S), Kasai, close to the Angola border. This is the only locality in Zaïre for *molitor pintoi*, described from Angola by Lawson (1966) as considerably darker than the race *palliditergum*, found more to the east (in Shaba and Zambia), with intermediates in northeast Angola. It should be noted that until then the Angola population had been called *puella* (see e.g. Rand 1953). Benson *et al.* (1971) claim that *pintoi* has a darker chin-spot than *palliditergum*, stating that *pintoi* occurs also in extreme northwestern Zambia, in the Mwinilunga area. The KMMA has specimens from Angola and Zambia, including some from Mwinilunga but I find them inseparable

from the Shaba birds. Birds from western Shaba (Kasaji) tend to be paler, contrary to what one would expect from Lawson (1966). I have considered them separately in Table 1, but they are similar in measurements to the other Shaba birds. *Pro usu* I name all *B. molitor* from Shaba as *B. molitor palliditergum*, whereas Chapin (1953) only included birds from the Marungu in the race of south-central Africa (named nominate *molitor* in his time).

Kivu and Rwanda are populated by a *B. molitor* form with possibly somewhat darker dorsal colouring than the Shaba specimens and with dark brown chin-spotted females. The males have a grey head top, not black as in some *B. minor*, though generally darker than in *palliditergum*. *Pro usu* I will call these birds *molitor puella*, a race described from Bussisi, Lake Victoria. A female labelled "Maniema" (southern Kivu province) belongs to this race (wing 63.5, tail 45.5 mm). A male from Kabambare (in Maniema) has wing 63, tail 42 mm, and could be either race. A pair from Mt Kabobo, extreme northeastern Shaba agrees in measurements with *palliditergum* (male: wing 63, tail 39 mm; female: wing 62.5, tail 40.5 mm). *B. molitor puella* abuts on northern *B. minor* (subspecies *nyansae*) in the extreme northern part of Kivu, near Butembo (0°09′N, 29°17′E). At Lutunguru (0°29′S, 28°47′E) 3 males were collected: one with a grey head top, the second one with a dark grey head top, the third with an almost black head top. They may belong to either species.

I find that many males from northern Zaïre have the head top blackish, just a few have it dark grey. In southwest Zaïre there seem to be more males with head top dark grey, but in view of the individual variation mentioned and the data in Table 1 I tend to agree with Chapin's (1953) point of view that *B. minor congoensis* of Lower Zaïre and Kasai is a synonym of *B. minor nyansae* of northern Kivu. The fact that these 2 *B. minor* populations are separated from each other by the equatorial forest block on the one hand and by the paraspecies *molitor* more to the east does not contradict this synonymy. It was shown elsewhere (Louette & Prigogine 1982) that the woodpecker *Dendropicos goertae* is also a recent immigrant from the north in southwestern Zaïre, in a period when the forest was split into relict patches. The case of *B. minor* is very similar to the one described there, although the woodpecker from Kasai has attained subspecific status.

Butembo is the only locality in Zaïre where chin-spotted and white-throated females are found together: *B. minor* and *B. molitor* are thus parapatric in Zaïre. There is however an adult female specimen without chin-spot from "Usumbura" (Burundi) thus being an apparent *B. minor* in '*B. molitor* country' (2 female *puella* from south of there are in KMMA). Chapin (1953) was doubtful about this occurrence and it may possibly be a mislabelled specimen. On the other hand if *B. minor* and *B. molitor* are closely related (as I think they are), interbreeding may account for specimens such as the Usumbura specimen and if the chin-spot is a character commanded by a simple genetic formula. I must add that there is a very dark male specimen from Bitshombo (3°30′S, 28°50′E), quite close to Usumbura, which may also be *B. minor*. It is very large (wing 65.5, tail 47.5 mm) and the possibility cannot be ruled out that there is a small

pocket of *B. minor* in *B. molitor*'s range in this area. Also at Djambala, in Congo Republic, according to Rand *et al.* (1959) females of both species were collected, which is well to the north of the contact in Angola (see above).

There is an aberrant ♂ specimen from Lusambo, Kasai (4°58′S, 23°25′E) in KMMA. In measurements (wing 62 mm, tail 44 mm) it corresponds to *minor,* but it has too much lustrous black in the plumage. There is only some white left on the dorsal side:– a little in front of the eyes, on the neck and here and there on the mantle and rump. Also, the white margins of the rectrices are very narrow. There is a black patch on the chin. This is much the darkest specimen known in this complex. (Also kindly examined by Dr C. Erard.)

Considering all this, there is an alternative taxonomic hypothesis to be investigated. If one considers tail/wing ratios of the populations in Zaïre (Table 1) it becomes clear that the geographical (and size) intermediate *puella* from Kivu and Rwanda is in the same range as the 2 *B. minor* populations and not in those of the Shaba *B. molitor palliditergum.* One could interpret this as a relationship of *puella* to the *B. minor* group, rather than to the *B. molitor* one. On the other hand the tail/wing ratios as calculated from Lawson's populations (1966) disagree with mine; they are as follows: *pintoi* ♂♂ .694, ♀♀ .685; *palliditergum* ♂♂ .725, ♀♀ .724; *puella* ♂♂ .684, ♀♀ .696.

Lawson's *B. molitor pintoi* specimens are well localised (in Angola), but the provenance of his other material is not specified, though probably east and south Africa. A general study may possibly show tail/wing ratio to be variable from one region to another in the whole of the *minor/molitor* range. The study announced by Lawson should make this clear. On the other hand, the presence of a chin-spot may prove not to be a specific character. The fact that in the Butembo region females of both phenotypes occur together is no proof of specific difference between *nyansae* and *puella.* In the absence of field studies and data on the contacts elsewhere in eastern Africa, in Angola and possibly in southeastern Kasai or northwestern Shaba, a hypothesis of conspecificity cannot yet be developed here.

Nectarinia bannermani and *N. verticalis*

No doubt Traylor (1962), followed by Hall & Moreau (1970) is correct that these 2 are separate species. However, it is not proven that they are really sympatric in any one area. In Angola, M. A. Traylor confirms that there is a *N. verticalis* specimen from Duque de Bragança whereas a *N. bannermani* specimen was collected at "42 km N.E. of Duque de Bragança". He therefore now feels that the statement "overlaps . . . in Malange" (1962: 115) may be "too strong a word". Evidence of sympatry in Zaïre is implicit in the statement by Lippens & Wille (1976) that they saw *bannermani* at Lusinga (8°56′S, 27°12′E) in the Upemba park and indeed, their picture (920: 418) represents this species; but from the files of H. Lehaen, the photographer of the expedition, it appears that it was taken at the Kundelungu, not at Lusinga. Verheyen's (1953: 593–594) specimens from the Upemba, reexamined by me, all prove to be *N. verticalis,* not

N. bannermani. Some of these latter specimens are also from Lusinga and the immediate neighbourhood, but were collected there 25 years before Lippens' & Wille's observation. *N. bannermani* occurs also at Kasaji (10°21'S, 23°29'E) (*in* Schouteden 1971), but the specimens from Kinda (9°18'S, 25°04'E) and Kayembe Mukulu (9°03'S, 23°57'E) (in KMMA) listed by him are *N. verticalis*. Also the specimen from Kapanga (8°02'S, 22°35'E) (Schouteden 1956) cannot be found and this locality must be deleted from *bannermani's* range. Lippens & Wille mention both species from the Kundelungu, more to the east, near the Zambian border, and they produce a picture of what is almost certainly *N. verticalis* (121: 419) and another of *N. bannermani* from there (see above). However, in the adjoining part of Zambia only *N. verticalis* occurs (Benson *et al.* 1971). In the Marungu neither of these 2 species has been recorded, but a race occurs there of the related *N. alinae* with some characteristics of *N. verticalis* (Dowsett & Prigogine 1974; Prigogine 1975).

Now remains the question of the subspecific identification of the Shaba *N. verticalis*. Chapin (1954) considers *bohndorffi* as inseparable from *cyanocephala*, the latter name thus applying to the birds of southwestern Zaïre (Kasai included). In Kivu, but also in Zambia (Benson *et al.* 1971), the race *viridisplendens* (with a greener lustrous head colour) occurs. The Upemba birds, mentioned above, tend to be greenish in lustre, whereas the specimens from Kinda, Kayembe Mukulu, and also one from Munie Mkoba (Maniema) decidedly are more bluish, thus agreeing better with western *cyanocephala*. It is probably a safe course to consider Shaba as a zone of contact between the 2 races *cyanocephala* and *viridisplendens*.

Nectarinia talatala

Two female specimens collected on 20 July 1969 at Mopala (in the Shaba panhandle) constitute the first records for this species from Zaïre. It is well known in the adjoining part of Zambia (Benson *et al.* 1971).

Ploceus insignis

The KMMA has a female specimen from Kasaji, Shaba, collected by Rev. Fisher on 23 July 1951. It was wrongly identified before as *P. bicolor*. The register data and preparation make me feel certain that no label error is involved. This locality is very far from the known range on the Albertine rift and in Cameroon. However, there is also a unique male from lowland forest at Gabela, Angola (Traylor 1962); but in Moreau (1959) Traylor found it "indistinguishable from a series from East Africa" and he has now most kindly sent me standard measurements (in mm, wing 83, tail 40, culmen 15.5, tarsus 20). These agree well with those from Kivu specimens. The female from Kasaji has a wing chord of 74.5 mm (right) or 74 mm (left), smaller than 24 adult females I measured from Kivu and Uganda (range: 78.5–82, mean 79.7 mm) but this could be due to skin preparation having the wings tight to the body. The tail length is 44 mm, being in the range of the same sample: 43.5–47 (mean 44.7 mm). Therefore I do not think that the Shaba (and Angola) bird deserves a new subspecific name, especially because in colour it is indistinguishable.

There is thus new evidence that *P. insignis* is not exclusively a montane

species (*contra* Lewis 1986) as there is also the observation by Brosset & Érard (1986) of a male bird in lowland Gabon. Incidentally, Heinrich (1958) mentioned another field observation at Duque de Bragança, but this was doubted by Traylor (1962). It may well be that *insignis* is present over a wider area in Central Africa, even out of the main forest block, than was accepted up to now.

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